

## ABSTRACT

A high purity of molten iron is produced efficiently at a higher productivity, by feeding a raw material mixture containing a carbonaceous  
5 reducing agent, an iron oxide-containing material and a CaO-containing material onto a hearth of a moving-hearth reducing furnace, heat-reducing the raw material mixture in the reducing furnace, and melting it in a melting  
furnace melting, wherein a blending amount of the CaO-containing material in the raw material mixture is adjusted in such a manner that another feeding  
10 of the CaO-containing material into the melting furnace makes a basicity of a slag generated in the melting furnace 1.1 or more an feeding amount of the CaO-containing material becomes 40 kg or less per ton of the molten iron obtained in the melting furnace.

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